

Abstract

Research Paper: Survey of Teaching Experience of University Life Sciences Faculty:
Pedagogical Practices in Use for Current/Recent Courses

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Pedagogical training can have a noteworthy impact on creating significant learning experiences for students. In K-12 education, teachers are required to have extensive training in pedagogies before obtaining a teaching license. Higher education on the other hand does not have these same requirements pertaining to teacher training before entering the classroom setting. With many educators who work at colleges and universities being hired to do research, few are likely to have training on how to incorporate student centered pedagogical techniques into their teaching practices. The purpose of this pilot study was to determine to what extent those working in higher education life sciences use pedagogies in their classroom design. A survey administered through the Qualtrics platform was used to gather information from respondents on demographics and the number of pedagogies incorporated into their lessons. A sample of sixteen educators was gathered from an R2 university that included professors as instructors of record as well as graduate teaching assistants. Linear regression models were used to determine if correlations exist between specific demographics and the number of pedagogies used by an instructor. Responses of importance that could not be codified and run through linear regression were analyzed for trending themes in responses. The findings of this pilot study imply that there are factors that can have an impact on the variety of pedagogies used in instructional design, such as pedagogical training. Conducting larger investigations at more colleges and universities will help to determine if this pattern holds true across higher education sciences or if this is an isolated set of findings. If similar results occur, next steps could include how to address getting educators the pedagogical training to improve student engagement and retention in science.

Keywords: pedagogies, higher education, teacher training, instructional design